A study of Assessment of Quality of Life (AQoL) of geriatric population residing in urban & urban slum area: A comparative study

Supriya S Patil, AB Kale and UT Kumbhar

Abstract

Aim: A Community based cross-sectional study on assessment of Quality of Life (QoL) of individuals of age 60 years and above was investigated in the urban and urban slum area, Karad, Dist. Satara, Maharashtra.

Materials and methods: Out of total 288 respondents of 60 years and above studied, out of which 153 (53.1%) from urban and 135 (46.9%) from urban slum.

Results: In all 49.6% were males from urban and 39.3% from urban slum area. The female respondents comprised 50.3% and 60.7% were from urban and urban slum area respectively which was statistically significant (p=0.0192). Majority of the population from urban slum area was from socio-economic status of class IV and class V (81.5%) and 85.6% from class I in urban area. The proportion of study subjects having best HR-QoL in the age group of 60-69 age group (young old) was found higher than old old age group (70+) in urban and urban slum area. In the mean scores of all dimensions were on higher side in urban area than urban slum area. In the mental dimension score was on higher in all dimensions in old old and young old age group.

There was significant difference found in the ranking HR-QoL and sex distribution in both the areas.

Conclusion: The present study revealed that mean age among slum elderly were lower than urban population. Slum aged was less educated and from lower socioeconomic class. In both the areas most of elderly were not economically independent. Though female respondents were higher than males, their proportion was higher as far as illiteracy, dependency, loneliness, widowhood and in chronic diseases are concerned. Due to poor living conditions and lack of awareness the proportion of communicable diseases were more common among slum aged than urban area. Age, gender, marital status, type of family and relationship affects the Quality of life of elderly.

Keywords: Geriatric population, Morbidity pattern, Quality of Life

Introduction

Aging refers to normal, progressive and irreversible biological changes that occur over an individual’s life span. Aging is a constant, predictable process that involves growth and development of living organisms. Aging can also be defined as a state of mind, which does not always keep pace with our chronological age. Attitude and coping with the normal changes, challenges and opportunities of later life may best define our age [1].

The Indian matured populace is at present the second biggest on the planet. Indisputably the quantity of the over 60 yrs populace in India will increment from 76 million of every 2001 to 137 million by 2021. There is steady ascent in the older populace in India which is 5.4 percent in 1951, the extent of 60+people developed to 6.4 percent in 1981 and is anticipated to be near 8.1 percent in 2001 [2]. With fast increment in old populace joined by a decrease in the physiological capacities in this age gathering, the preeminent obvious test is to forestall physiological maturing getting changed over into obsessive maturing for example at the point when sickness happen. The psychosocial condition around older is likewise to be kept healthy [3]. The consideration of the old is drawing increasingly more consideration of the Government and open. It is as of now a significant social and medical issue in prosperous nations. While Science has delayed life, the progressions that it has realized in social and social examples have burglarized the old of their status and confidence and have denied them of progress to work enough in the society [4].
One cannot stop aging, so considering upcoming problems with aging WHO has selected the theme of world health day in year 2012 on geriatrics. The title of the theme was “Aging and health: add years to life” This means whatever extra years added to life that should be lived as high quality as possible and with full health. They should be independent and enjoy their life happily. To calculate QoL (Quality of Life) require a scientific and approved tool as it is a subjective phenomenon. Such studies conducted in urban and urban slum area are very rare. So this study was conducted to see the difference in QoL among elderly population in urban and urban slum area and to study the causative factors, if exits, between these two groups.

**Material and Method**

This study was conducted in Urban and urban slum area of Karad town, Dist. Satara, Maharashtra. The urban slum area is a slum community adopted under the Urban Health Training Center (UHTC) of KIMS Karad, situated on National Highway -4 (Pune -Bangalore). There are fifteen residential areas present in the Karad town, out of which Somwar Peth was selected randomly by using lottery method. All individuals 60 years and above were taken as study subjects from this residential area. The other group of all individuals 60 years and above were the study subjects of urban slum area, which is an authorized slum community adopted under the Urban Health Training Centre (UHTC) of dept of Community Medicine of KIMS, at Agashivnagar, Karad and 2 kms away from the KIMS hospital with total population around 1700, comprising of Hindus, Muslims and Buddha was drawn randomly. This area has mixed (viz. kachha, pakka house) constructions. The Project was completed by utilizing the Assessment of Quality of Life (AQoL) instrument (Australian Center for Quality of Life) 21 with due composed assent, involving 5-measurements of absolute 15-things to evaluate the Health Related Quality Of Life (HR-QoL). The dimensions were illness, independence, relationship, senses and mental. Each dimension consists of three -items. The information on personnel data, family, social and psychological background was collected. Thorough medical examination of each elderly subject was carried out at home. For height the subject was asked to stand with back against wall without foot wear, heels touching the ground, arms to the side and eyes on front, parallel to ground. The reading coinciding with the occipital edge with a scale put perpendicular to it and was noted with the help of measuring tape. Weight of all study subjects with minimum cloths on the body was recorded in kilograms with the help of dial weighing scale which was at Zero before measuring it. Blood pressure was measured in supine position with standardized sphygmomanometer. The important observations and morbid conditions requiring further investigations or special treatment were referred to Sub-district hospital Karad or Krishna hospital. Illness found in the aged was treated with the available treatment and counseling. Chronic systemic diseases with established diagnosis by a specialist in that field and on treatment was considered a positive case.

Data was collected and entered onto an excel data spread sheet. Rates, ratios and suitable statistical methods used by the software – statistical package SPSS version 20. Data were condensed in the form of tables, graphs and diagrams. Chi-square test was applied to analyze the association between different socioeconomic factors and was considered significant when probability was less than 0.05.

Fig 1: Spot Map A) Urban area; B) Urban Slum
Results and Discussion

Sociodemographic factors of Urban and urban slum area

The proportion of elderly found in urban area was 10.1% and in urban slum area was 7.9%, which was found higher in urban area and lower in urban slum area compared with recent statistics in NSSO survey 2007-085 (India:7.5%, Maharashtra:8.7%) Majority of the population was from the age group 60-69 years i.e. young old (urban slum=69.6%, urban=60.1%). There was significant difference in the age distribution in urban and urban slum area. It was found that 30.4% from urban slum and 39.9% from urban area belonged to the age group 70 years and above. It showed that longevity among urban population was more than the urban slum population.

Illiteracy among both the groups combined was found 49.3%. While respondents in urban slum it was 80.7%, which was higher than urban area (21.6%). There was significant difference in the literacy rate between two areas (p<0.0001). This could be because of lack of awareness regarding the importance of education in urban slum population. Female investigation subjects were more unskilled than guys in both the examination territories. This could be expected to teaching females in those days was not considered as significant concerning a marriage at an early age. In urban and urban slum area number of males as head of the families was significantly more than females (p<0.0001). Total number of head of family among elderly subjects was 57.5% in urban area and 59.3% in urban slum area. The reason for such findings could be due to traditional male predominance in the country like India.

In the urban area 85.5% males and 55.8% female respondents were living with spouse and only 14.4% were widower(wife died), which was higher in widows(husband died) (44.2%). Similarly in the urban slum area 56.1% were widows and 22.6% were widower. Majority of the subjects belonged to joint families (urban = 50.3%, urban slum =62.2%). However in the current study in urban area 85.6% were from class I, 11.8% from class II, 2.6% from class III; while no one was from class IV and class V There was significant difference found in the socioeconomic status of urban and urban slum area (p<0.001) may be because having no fixed earnings, poor literacy rate, no social support system in slum area.

56.15% females were having tobacco addiction, while only 11.7% urban females having same addiction. As mishari (one form of tobacco) user among females were more common in urban slum than urban area and was statistically significant.

Morbidity Pattern

32.6% from urban and 51% from urban slum population having irregular sleeping habits. Irregular sleeping habit in urban slum females (61%) was higher than urban females (40.2%). Both the areas showed significant difference in genders (urban; p=0.0147, urban slum; p=0.0122). A study conducted in Kashmir valley by Munshi et al showed 64.7% subjects were suffering from irregular sleeping habits which was found higher than present study which might be due to insecurity among the people in that area [5]. 39.3% in urban and 34.6% in urban slum study subjects were having decreased appetite. The appetite was poor among female study subjects than males in both the study areas and showed significant difference(urban; p=0.0048,urban slum; p=0.0004) This may be due to physical independence of elderly in later life is closely linked with healthy lifestyle and females are overburdened with responsibilities even in old age & gender bias. Similar finding was found in Munshi et al study in which 37.2% subjects having poor appetite [5]. Normal range of BMI (Urban=53.6%, Urban slum=56.3%). In the overweight group proportion of subjects was slightly higher in the urban slum area (42.2%) than urban area (38.6%). In the Obese I category 7.2% urban subjects and 1.5% urban slum subjects were present. It was found that BMI in urban and urban slum area did not show statistically significant difference (p= 0.094), also observed by other workers by Sharma et al and Sen Gupta et al study [6, 7].

Quality of Life

About (Table 1) 48.96% of all study subjects in both the groups were having Best HR-QoL (Health Related Quality of Life) (rank 1st), out of which 60.7% and 38.6% in urban slum and urban area respectively. The proportion of bad HR-QoL (rank 4) was 5.9% in slum and 2.6% in urban area. The proportion of elderly having best HR-QoL was much higher in urban slum than urban area. The table shows significant difference in the scorers of both areas (p<0.0001). This suggests that the Quality of life among urban population was lower than that of the slum population. This is in contrast to notion that urban people have good quality of life which may be due to cumulative scored effect of various dimensions(viz. illness, independence, relationship, senses, mental) As most of the study subjects were migrated to slum from rural area, the aged population from urban slum was were less concern about their health and living conditions, while in urban area people were more aware of disease conditions and have high expectations in having good living conditions and from society. So these conditions may affect the Quality of life among both the study areas.

<table>
<thead>
<tr>
<th>HR-QoL (Score)</th>
<th>Urban (%)</th>
<th>Slum (%)</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Best (0-9)</td>
<td>59 (38.6)</td>
<td>82 (60.7)</td>
<td>141 (48.96)</td>
</tr>
<tr>
<td>Good (10-18)</td>
<td>56 (36.6)</td>
<td>40 (29.6)</td>
<td>96 (33.3)</td>
</tr>
<tr>
<td>Average (19-27)</td>
<td>33 (21.6)</td>
<td>4 (3)</td>
<td>37 (12.85)</td>
</tr>
<tr>
<td>Bad (28-36)</td>
<td>4 (2.6)</td>
<td>8 (5.9)</td>
<td>12 (4.17)</td>
</tr>
<tr>
<td>Worst (37-45)</td>
<td>1 (0.7)</td>
<td>1 (0.7)</td>
<td>2 (0.69)</td>
</tr>
</tbody>
</table>

The mean scores of all dimensions in (table 2) All dimensions as reflected in overall HR-QoL score, with increasing mean scores the Quality of Life decreases in present study. As scores of all dimensions was higher in urban area suggests that HR-QoL was lower in urban area than urban slum area. In Mudley et al study the elders living in the urban slum area had significantly lower level of Quality of Life in the domains of physical score (51.2 ±7.1) and psychological score (51.3 ±7.12) than the rural elderly populations [8]. As older from country region appreciate the power and have positive inclination about future because of customary ceremonies may influence their personal satisfaction. The result showed variation which may be
because author used different tool to calculate Quality of Life (WHO-QOL) and also due to different study setting.

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Urban Mean</th>
<th>Urban SD</th>
<th>Slum Mean</th>
<th>Slum SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illness</td>
<td>2.77</td>
<td>2.609</td>
<td>1.83</td>
<td>2.310</td>
</tr>
<tr>
<td>Independent</td>
<td>2.59</td>
<td>2.202</td>
<td>1.61</td>
<td>2.206</td>
</tr>
<tr>
<td>Relationship</td>
<td>2.75</td>
<td>2.624</td>
<td>2.17</td>
<td>2.313</td>
</tr>
<tr>
<td>Senses</td>
<td>1.37</td>
<td>1.247</td>
<td>1.07</td>
<td>1.351</td>
</tr>
<tr>
<td>Mental</td>
<td>3.75</td>
<td>1.942</td>
<td>2.77</td>
<td>1.939</td>
</tr>
<tr>
<td>HR-QOL</td>
<td>13.05</td>
<td>7.846</td>
<td>9.44</td>
<td>7.947</td>
</tr>
</tbody>
</table>

Similarly in Barua-Mangesh et al. [9] study there was a significant difference in the mean scores in the physical, psychological and social domains, and also on total scores in the age groups of 60-69 years and 70 years showing later age group physical and psychological health decline with advancing age and decreasing Quality of Life. It is evident from table no.24 that significant difference was found in HR-QoL and type of family in urban area (p=0.039) but in urban slum area the result was not found significant (p=0.25). In relationship dimension (table no.25) both areas showed statistically significant difference. (Urban area =p<0.01, Urban slum area=0.0015).

Conclusion

The present study revealed that mean age among slum elderly were lower than urban population. Slum aged was less educated and from lower socioeconomic class. In both the areas most of elderly were not economically independent. Though female respondents were higher than males, their proportion was higher as far as illiteracy, dependency, loneliness, widowhood and in chronic diseases are concerned. Due to poor living conditions and lack of awareness the proportion of communicable diseases were more common among slum aged than urban area. Age, gender, marital status, type of family and relationship affects the Quality of life of elderly. Maturing is a general wonder, with cutting edge richness control, improvement in wellbeing and social administrations future has expanded. Maturing has significant impact on the individual status in the family, the work power, objectives and association of wellbeing, social administrations, approaches and practices of the legislature. Wellbeing is indispensable to keep up prosperity and Quality of Life of Aged populace.

Conflict of interest: No Conflict of interest

Funding: KIMSDU, Karad

References